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4. The vehicle damage detection system of claim 1, further comprising an actuator operably coupled to a weapon supported by the vehicle, the actuator in communication with the damage detection processing system and configured to move the weapon in the direction of the damage event origination axis in response to the data from the damage detection processing system.

5. The vehicle damage detection system of claim 4, wherein the actuator includes a first actuator to rotate a turret about a vertical axis, and a second actuator to pivot a weapon mount about a horizontal axis.

6. The vehicle damage detection system of claim 1, wherein the plurality of sensing devices includes a first sensing device positioned on an external surface of a front passenger door, a second sensing device positioned on an external surface of a first rear passenger door, a third sensing device positioned on an external surface of a first rear quarter panel, a fourth sensing device positioned on an external surface of a rear deck, a fifth sensing device positioned on an external surface of a second rear quarter panel, a sixth sensing device positioned on an external surface of a second rear passenger door, and a seventh sensing device positioned on an external surface of a front driver door.

7. The vehicle damage detection system of claim 1, further comprising an acoustic sensor supported by the vehicle and in communication with the damage detection processing system, the acoustic sensor being configured to detect soundwaves generated by the firing of a projectile.

8. The vehicle damage detection system of claim 1, further comprising at least one camera supported by the vehicle and in communication with the damage detection processing system, the at least one camera being configured to detect weapon fire flash events which correlated by the processing system with the data from the damage sensing devices.

9. The vehicle damage detection system of claim 1, wherein each of the couplers comprise at least one of a hook and loop fastener, a latch, a bolt, and an adhesive.

10. The vehicle damage detection system of claim 1, wherein said data on a damage event further comprises one or more additional locations of the damage event in said sensing device based on said measurement system.

11. The vehicle damage detection system of claim 10, wherein said damage event orientation axis is determined by said damage event processing system at least in part based on spatial relationships of said locations of said damage events.

12. A vehicle damage detection system comprising:

a first sensing device including a first layer operably coupled to a vehicle for sensing damage events, the first layer including a plurality of measuring portions, each of the measuring portions adapted to conduct an electrical signal from an input coupling point to an output coupling point;

a first measurement system in electrical communication with the first sensing device, the first measurement system including a multiplexer configured to provide electrical signal inputs to the input coupling points of the first sensing device, and configured to measure electrical signal outputs at the output coupling points of the first sensing device;

a second sensing device positioned in spaced relation to the first sensing device, the second sensing device including a second layer operably coupled to the vehicle for sensing damage events, the second layer including a plurality of measuring portions, each of the

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measuring portions adapted to conduct an electrical signal from an input coupling point to an output coupling point;

a second measurement system in electrical communication with the second sensing device, the second measurement system including a multiplexer configured to provide electrical signal inputs to the input coupling points of the second sensing device, and configured to measure electrical signal outputs at the output coupling points of the second sensing device;

at least one damage detection processing system operably coupled to the first measurement system and the second measurement system, the at least one damage detection processing system configured to determine data on a damage event from sensed damage events based on changes between the electrical signal inputs at the input coupling points and the electrical signal outputs at the output coupling points of the first sensing device and the second sensing device, the data including a location of the damage event on the respective first sensing device and second sensing device, and a damage event origination axis directed to the point of origin of the damage event;

an electrical connector operably coupling the first sensing device with the second sensing device;

a main controller operably coupled to the first sensing device and the second sensing device; and

a user interface operably coupled to the damage detection processing systems of the first and second sensing devices;

wherein said determining said data on said damage event from said sensed damage events based on said changes between the electrical signal inputs at the input coupling points and the electrical signal outputs at the output coupling points is based in part on a comparison using a baseline electromagnetic signal layer measurement data determination producing a first and second baseline state data of said first and second layers created based on taking a respective first and second plurality of electromagnetic signal measurements of said first and second layers across respective pairs of said input coupling points and opposing corresponding said output coupling points before at least one said damage event.

13. The vehicle damage detection system of claim 12, wherein the user interface is configured to provide a visual display of the damage data including a representation of a damage alert, the damage event location and the damage event origination axis.

14. The vehicle damage detection system of claim 13, wherein the visual display includes a plurality of light sources selectively illuminated in alignment with the damage event origination axis.

15. The vehicle damage detection system of claim 12, wherein:

the first sensing device further includes a second layer positioned in parallel spaced relation to the first layer and including a plurality of measuring portions adapted to conduct an electrical signal from an input coupling point to an output coupling point, the measuring portions of the first layer of the first sensing device being oriented in a first direction and the measuring portions of the second layer of the first sensing device being oriented in a second direction different from the first direction, wherein the processing system determines the location of the damage event along a first axis based upon measurement data comprising said first plurality